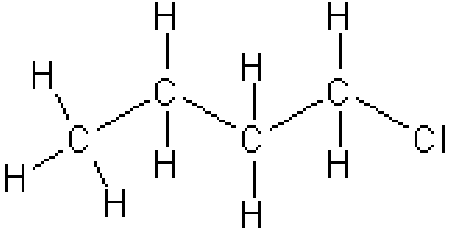
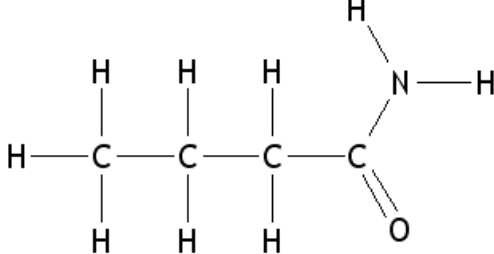
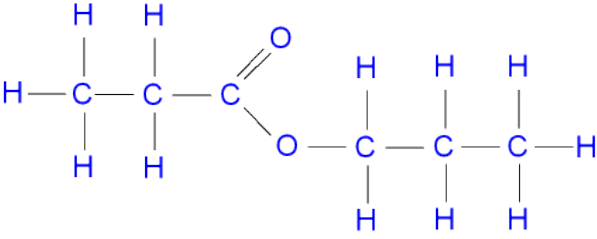
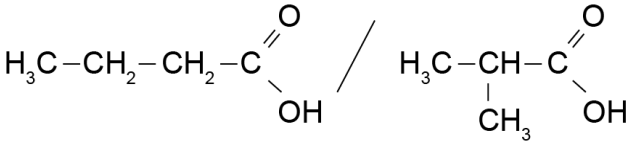
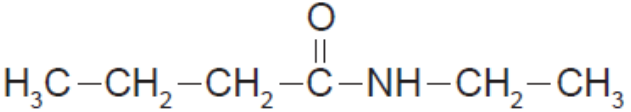
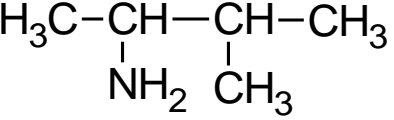
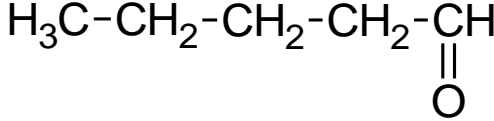
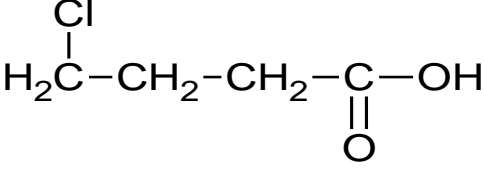
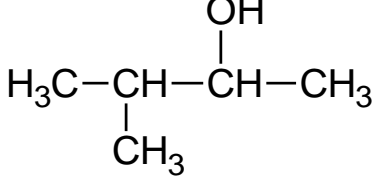
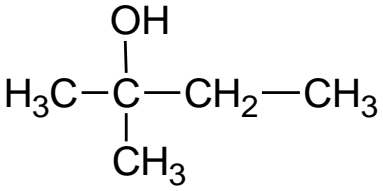
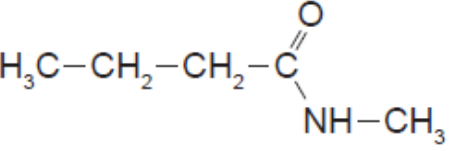
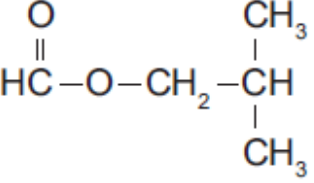
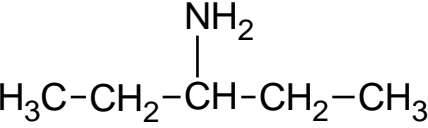
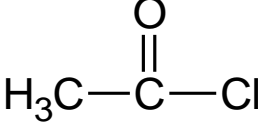
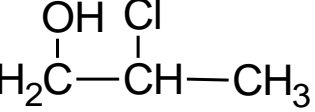


ANSWERS: Level 3 Structural formula

<p>3-bromopentan-2-one</p> $\begin{array}{c} \text{O} \\ \parallel \\ \text{H}_3\text{C}-\text{C}-\text{CH}(\text{Br})-\text{CH}_2-\text{CH}_3 \end{array}$	<p>2-methylbutanal</p> $\begin{array}{c} \text{O} \\ \parallel \\ \text{H}_3\text{C}-\text{CH}_2-\text{CH}-\text{C}-\text{H} \\ \\ \text{CH}_3 \end{array}$	
<p>propanamine</p> $\begin{array}{ccccccc} & \text{H} & & \text{H} & & \text{H} & & \text{H} \\ & & & & & & & \\ \text{H} & -\text{C} & - & \text{C} & - & \text{C} & - & \text{N} - \text{H} \\ & & & & & & & \\ & \text{H} & & \text{H} & & \text{H} & & \end{array}$	<p>propanone</p> $\begin{array}{c} \text{O} \\ \parallel \\ \text{H}_3\text{C}-\text{C}-\text{CH}_3 \end{array}$	<p>propanal</p> $\begin{array}{ccccc} & \text{H} & & \text{H} & & \text{O} \\ & & & & & \parallel \\ \text{H} & -\text{C} & - & \text{C} & - & \text{C} \\ & & & & & \\ & \text{H} & & \text{H} & & \text{H} \end{array}$
<p>propanamide</p> $\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3-\text{CH}_2-\text{C} \\ \\ \text{NH}_2 \end{array}$	<p>pentan-2-one</p> $\begin{array}{c} \text{O} \\ \parallel \\ \text{H}_3\text{C}-\text{C}(\text{H})-\text{CH}_2-\text{C}-\text{CH}_3 \\ \\ \text{H}_2 \end{array}$	<p>butanal</p> $\begin{array}{ccccccc} & \text{H} & & \text{H} & & \text{H} & & \text{O} \\ & & & & & & & \parallel \\ \text{H} & -\text{C} & - & \text{C} & - & \text{C} & - & \text{C} \\ & & & & & & & \\ & \text{H} & & \text{H} & & \text{H} & & \text{H} \end{array}$
<p>aminomethane</p> $\begin{array}{c} \text{H} \\ \\ \text{H}-\text{C}-\text{N} \\ \quad \diagup \quad \diagdown \\ \text{H} \quad \text{H} \quad \text{H} \end{array}$	<p>a secondary alcohol $\text{C}_4\text{H}_{10}\text{O}$</p> $\begin{array}{ccccccc} & \text{H} & & \text{H} & & \text{H} & & \text{H} \\ & & & & & & & \\ \text{H} & -\text{C} & - & \text{C} & - & \text{C} & - & \text{C} - \text{H} \\ & & & & & & & \\ & \text{H} & & \text{H} & & \text{OH} & & \text{H} \end{array}$	<p>ethanamide</p> $\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3-\text{C} \\ \\ \text{NH}_2 \end{array}$

<p>1-chlorobutane</p> 	<p>butanamide</p> 	<p>propyl propanoate</p> 
<p>a carboxylic acid C₄H₈O₂</p>  <p>butanoic acid / 2-methylpropanoic acid</p>	<p>N-ethylbutanamide</p> 	<p>2-amino-3-methylbutane</p> 
<p>pentanal</p> 	<p>4-chlorobutanoic acid</p> 	<p>C₅H₁₁OH a branched-chain secondary alcohol</p> 
<p>C₅H₁₁OH a branched chain tertiary alcohol</p> 	<p>N-methylbutanamide</p> 	<p>2-methylpropyl methanoate</p> 
<p>3-aminopentane</p> 	<p>ethanoyl chloride</p> 	<p>2-chloropropan-1-ol</p> 

<p>2-methylbutanal</p> $\begin{array}{c} \text{O} \\ \parallel \\ \text{HC}-\text{CH}-\text{CH}_2-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	<p>butanamide</p> $\begin{array}{c} \text{CH}_3-\text{CH}_2-\text{CH}_2-\text{C}=\text{O} \\ \\ \text{NH}_2 \end{array}$	<p>2-chloro pentanal</p> $\begin{array}{c} \text{Cl} \\ \\ \text{CH}_3\text{CH}_2\text{CH}_2-\text{CH}-\text{CH}=\text{O} \end{array}$
<p>2-amino-2,3-dimethyl butane</p> $\begin{array}{c} \text{CH}_3 \quad \text{CH}_3 \\ \quad \\ \text{CH}_3-\text{CH}-\text{C}-\text{CH}_3 \\ \\ \text{NH}_2 \end{array}$	<p>An acid chloride with 4 carbon atoms</p> $\begin{array}{c} \text{CH}_3\text{CH}_2\text{CH}_2-\text{C}-\text{Cl} \\ \\ \text{O} \end{array}$ <p>OR</p> $\begin{array}{c} \text{CH}_3 \\ \\ \text{H}_3\text{C}-\text{C}-\text{C}=\text{O} \\ \quad \quad \\ \text{H} \quad \quad \text{Cl} \end{array}$	<p>An amino acid with 3 carbon atoms</p> $\begin{array}{c} \text{O} \\ \\ \text{H}_2\text{N}-\text{CH}-\text{C} \\ \quad \quad \\ \text{CH}_3 \quad \quad \text{OH} \end{array}$ <p>OR</p> $\begin{array}{c} \text{O} \\ \\ \text{H}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{C} \\ \quad \quad \quad \\ \quad \quad \quad \text{OH} \end{array}$
<p>butanamide</p> $\begin{array}{c} \text{CH}_3-\text{CH}_2-\text{CH}_2-\text{C}=\text{O} \\ \\ \text{NH}_2 \end{array}$	<p>propanoyl chloride</p> $\begin{array}{c} \text{O} \\ \\ \text{CH}_3-\text{CH}_2-\text{C} \\ \quad \quad \\ \quad \quad \text{Cl} \end{array}$	<p>trans isomer of C₄H₈O</p> $\begin{array}{c} \text{CH}_3 \quad \text{H} \\ \diagdown \quad \diagup \\ \text{C}=\text{C} \\ \diagup \quad \diagdown \\ \text{H} \quad \text{CH}_2-\text{OH} \end{array}$ <p>trans 1-hydroxybut-2-ene</p>
<p>cis isomer of C₄H₈O</p> $\begin{array}{c} \text{H} \quad \text{H} \\ \diagdown \quad \diagup \\ \text{C}=\text{C} \\ \diagup \quad \diagdown \\ \text{CH}_3 \quad \text{CH}_2-\text{OH} \end{array}$ <p>cis 1-hydroxybut-2-ene</p>	<p>pentan-2-one</p> $\begin{array}{c} \text{H}_3\text{C}-\text{CH}_2-\text{CH}_2-\text{C}-\text{CH}_3 \\ \\ \text{O} \end{array}$	<p>ethanoyl chloride</p> $\begin{array}{c} \text{O} \\ \\ \text{H}_3\text{C}-\text{C} \\ \quad \quad \\ \quad \quad \text{Cl} \end{array}$